

Roll No. _____

18/2665

B.C.A. (Fourth Semester)

Examination, 2018

Third Paper

(Software Engineering)

Time : Three Hours

Maximum Marks : 75

Note: Attempt any **five** questions. **All** questions carry equal marks.

Note: The answer to short questions should not exceed 200 words and the answers to long questions should not exceed 500 words.

1. Define the term "Software Engineering".
What are the phases in the development of properly engineered software? Discuss it from the generic point of view. 15

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2. (a) Explain how the development of System Scope is carried out in the Software Engineering Requirements Analysis phase. 8
- (b) How can we allocate top level processes and entities to their physical elements? Explain with an example. 7
3. Write an explanatory note on : $7\frac{1}{2} \times 2$
- (a) Creating the SRS document
- (b) Object Oriented Design Paradigm
4. Discuss with examples the different issues concerned with the following: 7+8
- (a) Design Principle for Input and Output document. <http://www.mgkvponline.com>
- (b) Design of Modules and Interfaces.
5. (a) What are the qualities of a Well-designed code? Discuss. 7
- (b) Differentiate between function oriented design and object oriented design. 8

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6. Explain the need for maintenance of software?
What are the different types of software maintenance? What are the points to be considered at the design phase in order to ensure maintainability? 15
7. Describe the steps in implementation of the new software system. How can the programming support environment be developed in order to ensure consistency in Implementation and changeover? 15
8. Write short notes on: 5+5+5
- (a) Data Flow Diagram
 - (b) Waterfall Model
 - (c) Software Quality
9. Explain with example: 5+5+5
- (a) Configuration Management
 - (b) CASE Tools
 - (c) Coupling and Cohesion .